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FIG. 3A

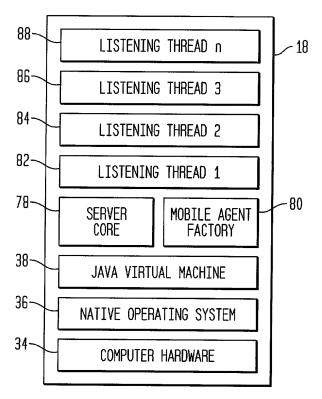
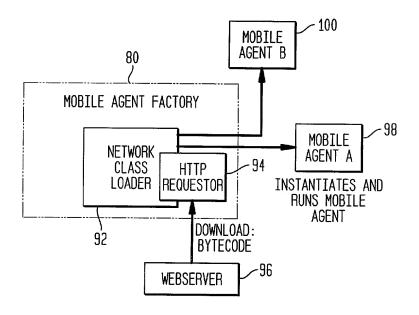


FIG. 3B



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FIG. 3C

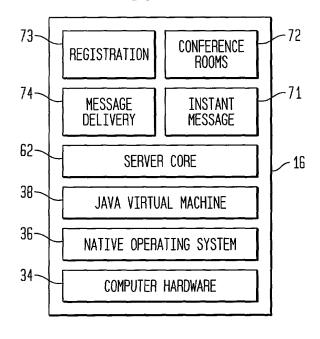
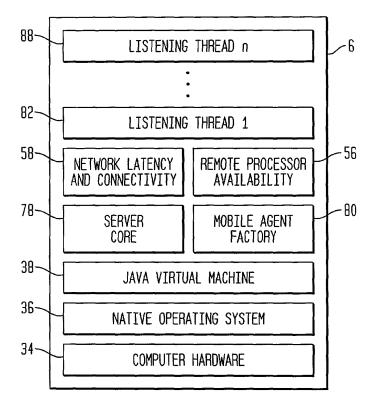
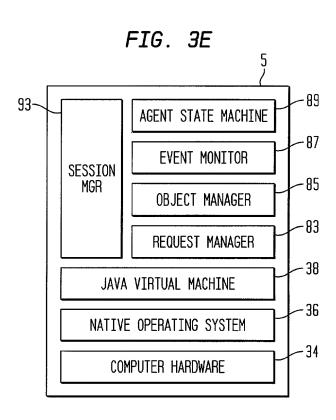
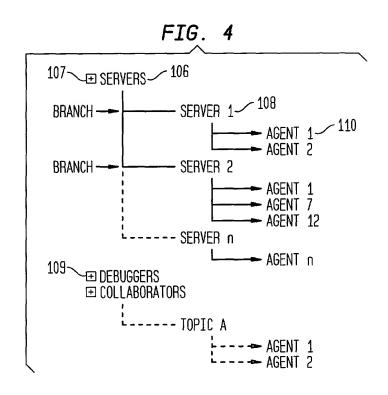
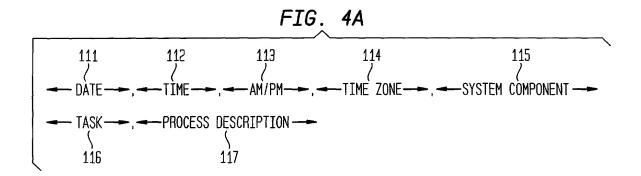


FIG. 3D



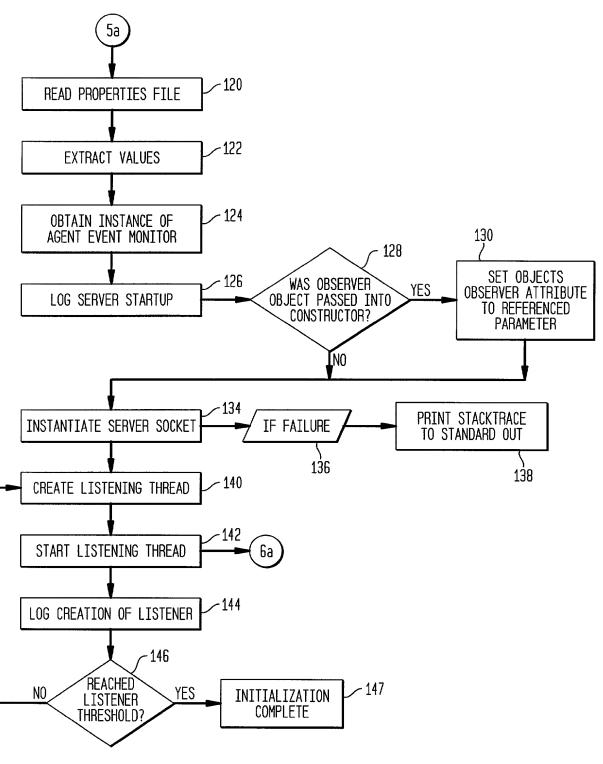


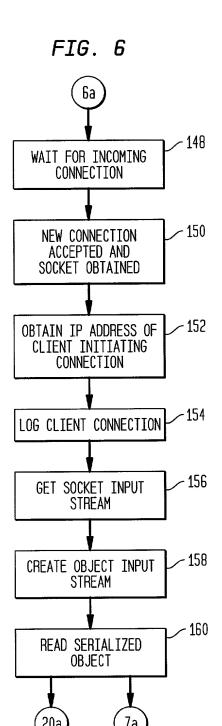


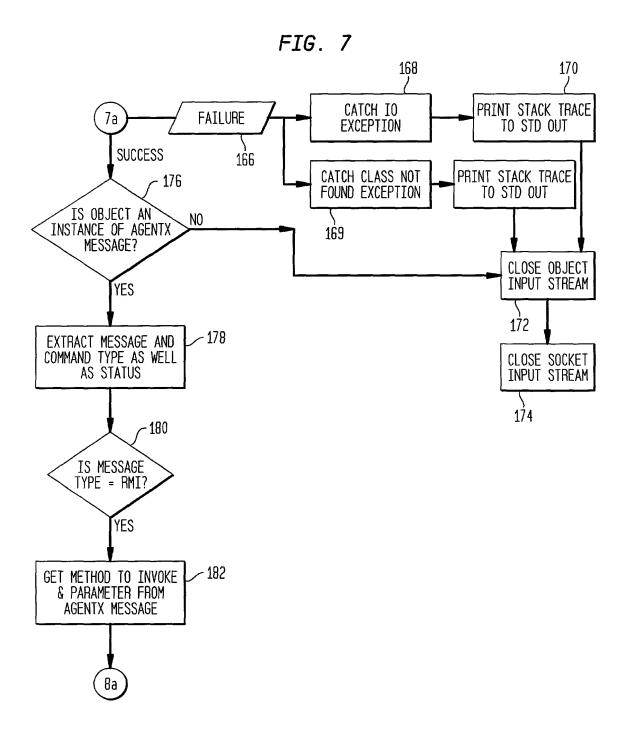


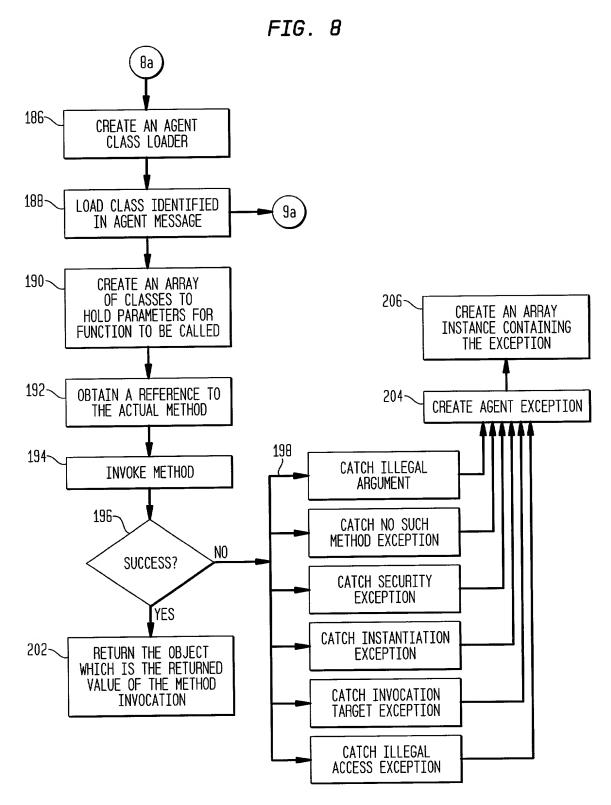
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FIG. 5









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FIG. 9

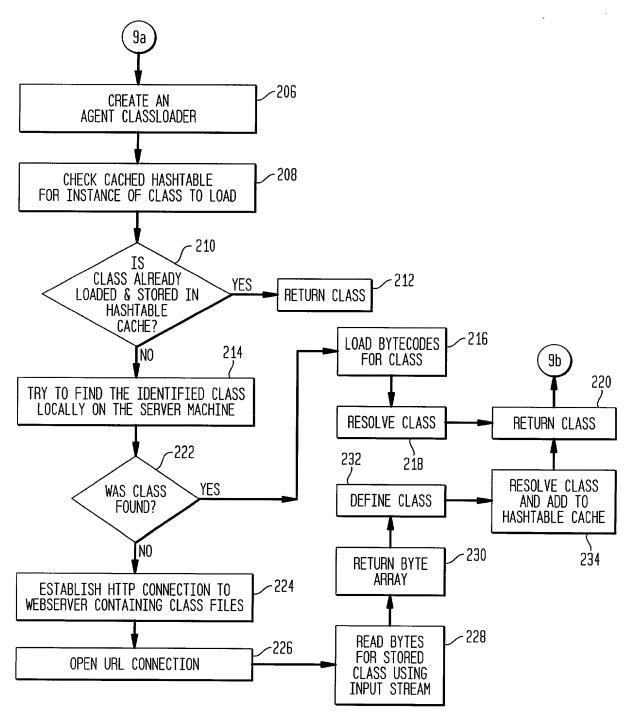
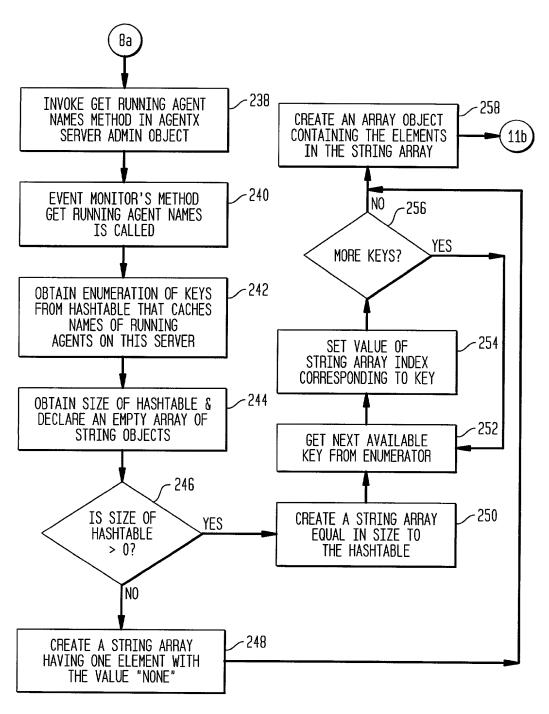
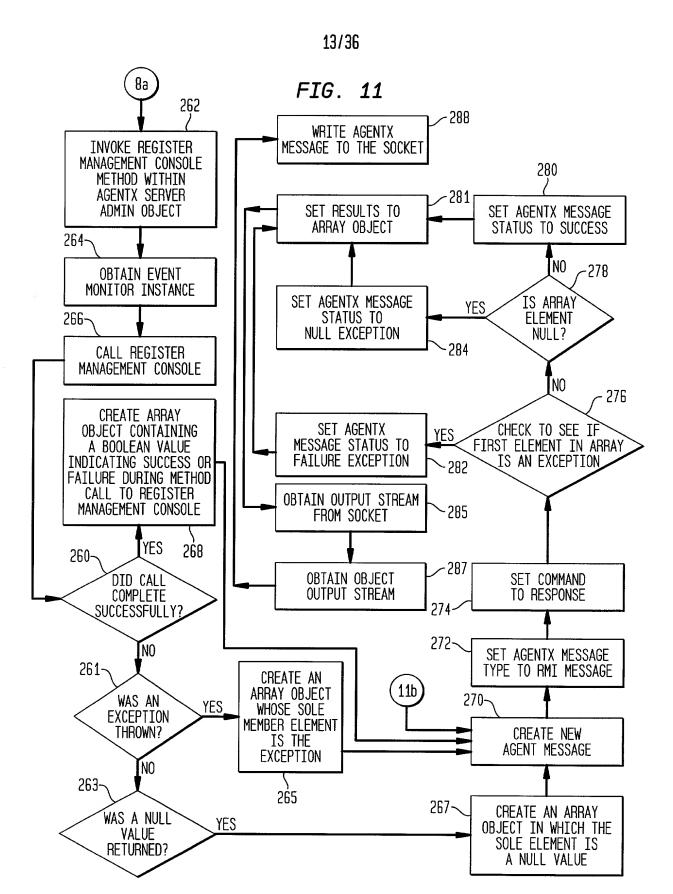


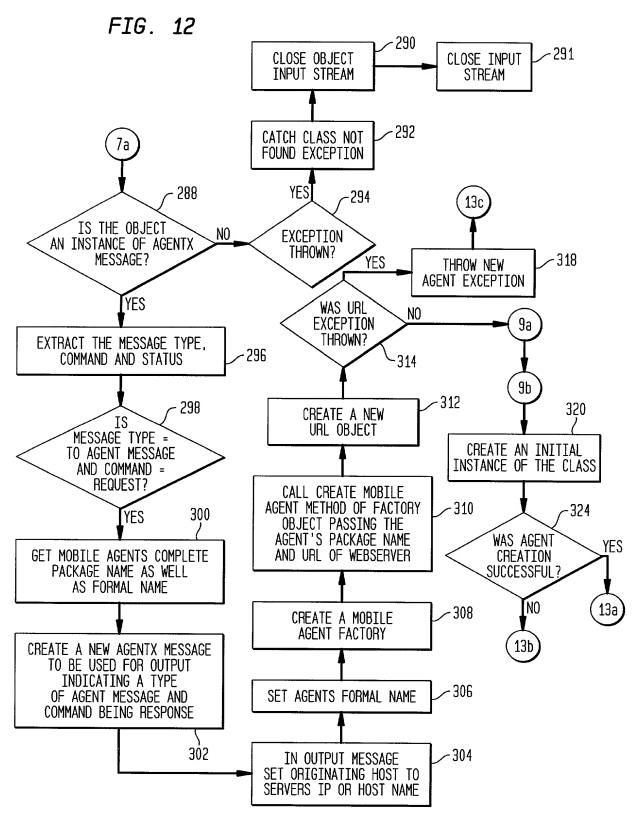
FIG. 10



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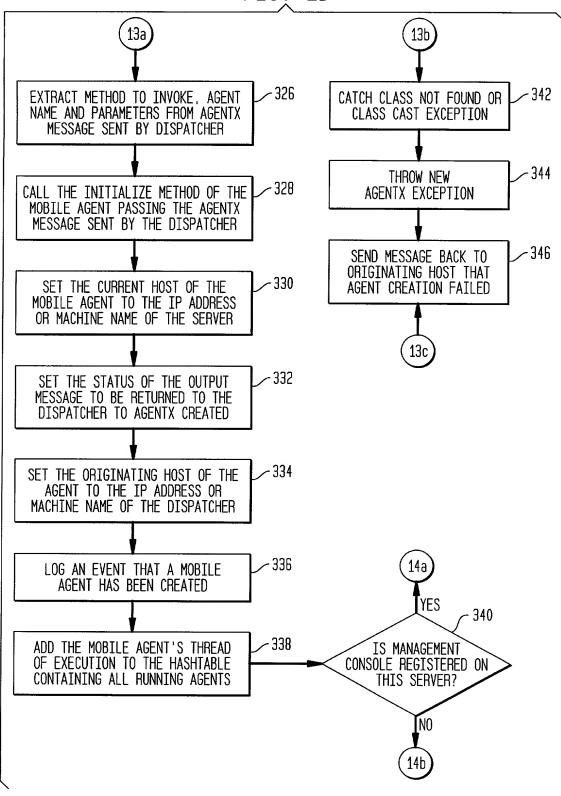
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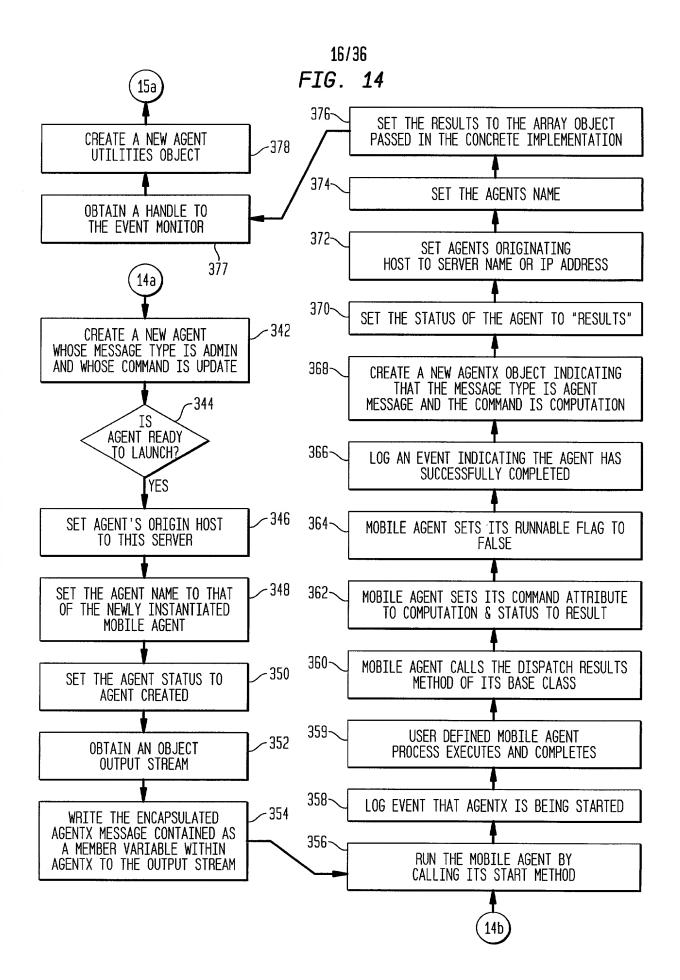




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FIG. 13





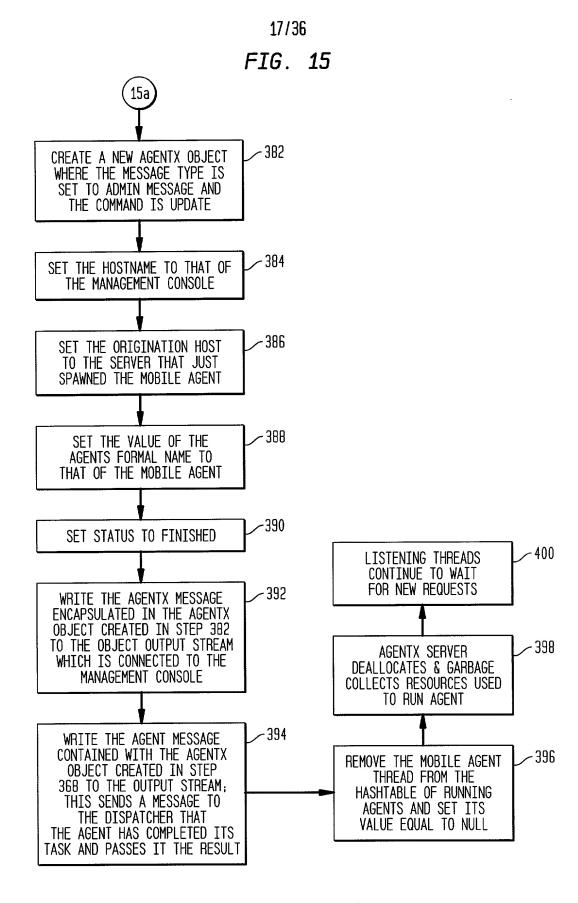
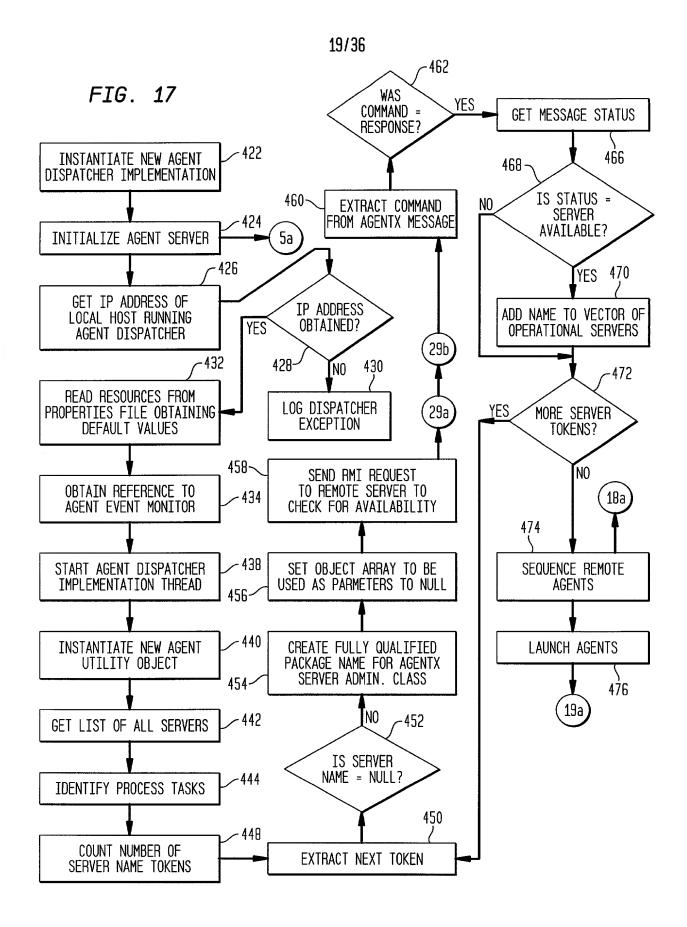
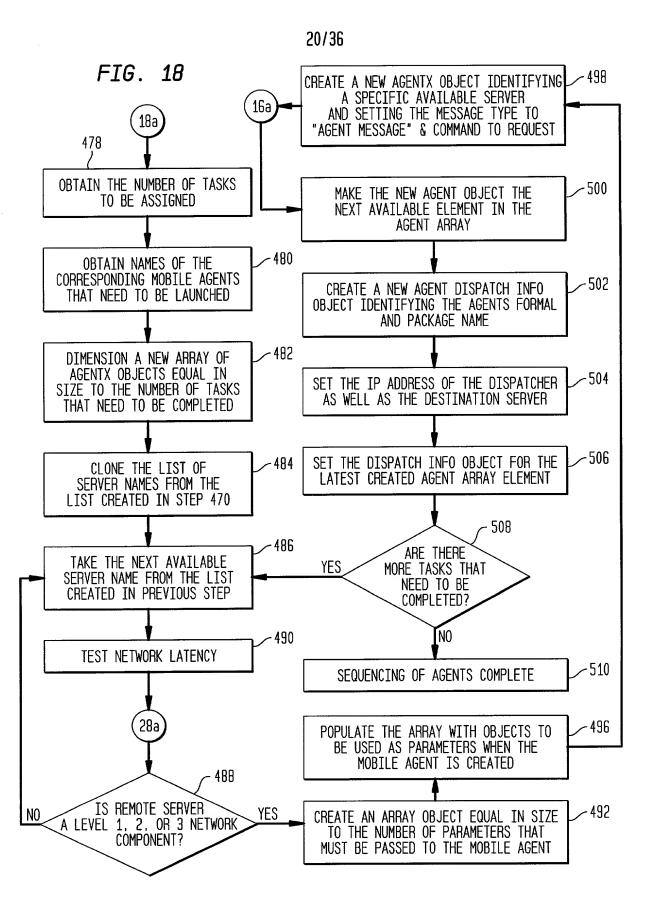


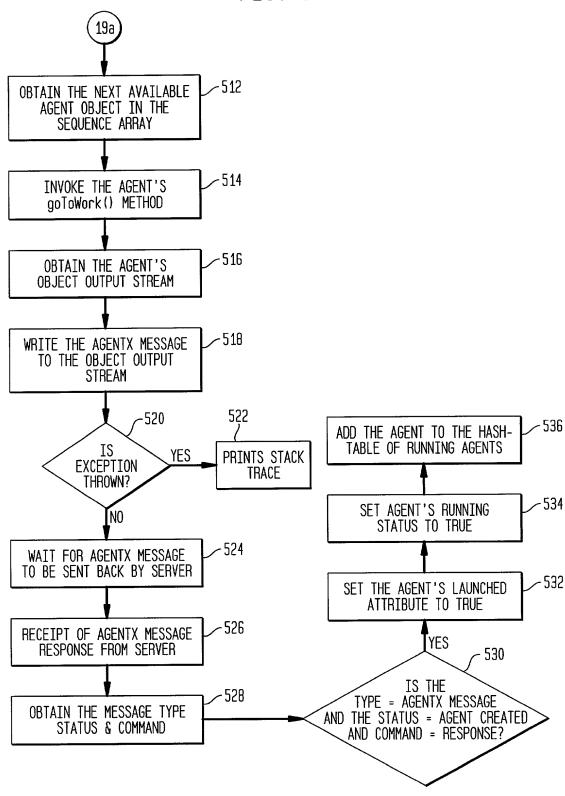
FIG. 16 422~ LOG **EXCEPTION** -402 SET THE DATA ATTRIBUTE FOR THE 420~ HOST TO CONNECT TO, TO THE VALUE PASSED INTO THE CONSTRUCTOR CATCH SOCKET EXCEPTION 416~ CATCH IO -404 OBTAIN THE DEFAULT PORT NUMBER FROM EXCEPTION A PROPERTIES FILE AS DATA STORAGE YES 408 406 CREATE A NEW CLIENT SIDE SOCKET WAS TO THE HOST & PORT NUMBER **EXCEPTION** PREVIOUSLY IDENTIFIED THROWN? **~410** NO OBTAIN INPUT STREAM & OUTPUT STREAMS FROM THE OPENED SOCKET -412 CREATE A NEW AGENTX MESSAGE SETTING THE TYPE TO "AGENT MESSAGE" AND COMMAND VALUE TO REQUEST - 414 SET BOOLEAN FLAG IDENTIFYING THAT AGENT IS READY TO LAUNCH





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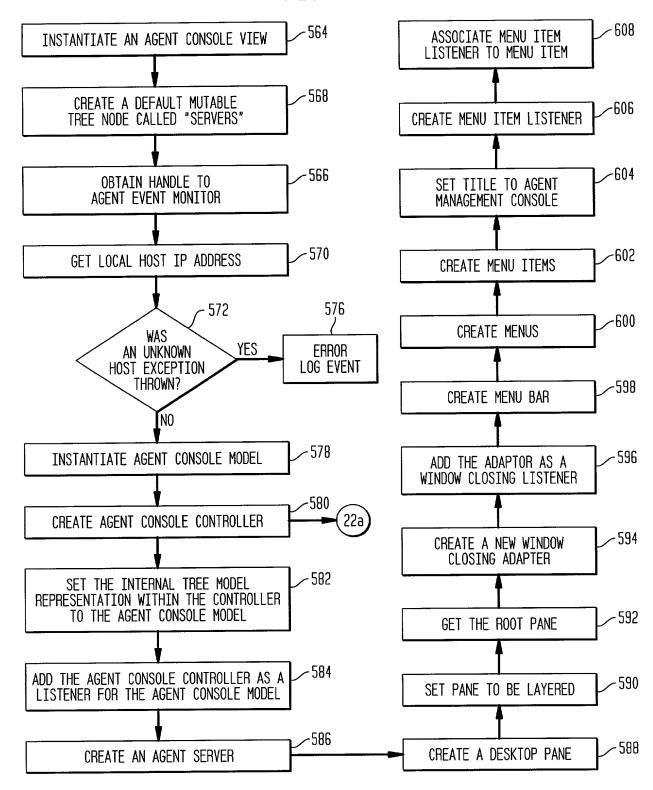
FIG. 19



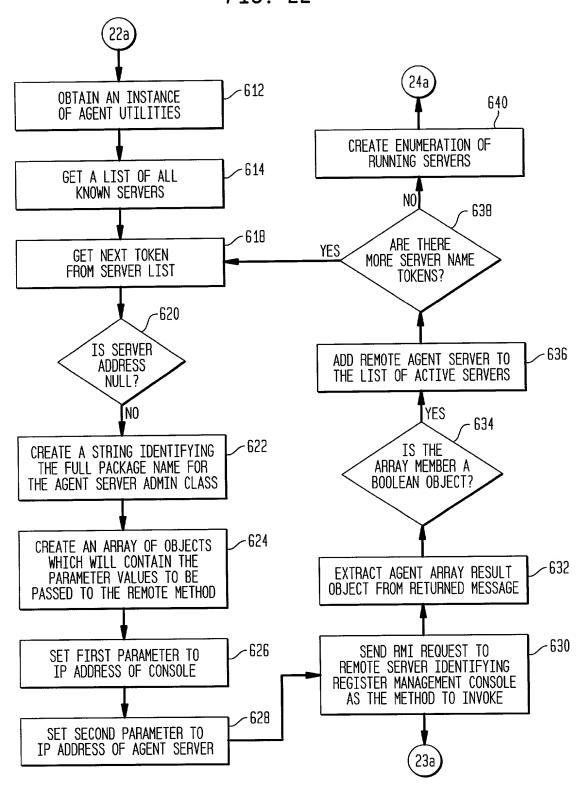
22/36 FIG. 20 538 IS THE OBJECT AN INSTANCE OF AN AGENTX MESSAGE? -558 EXECUTE APPLICATION SPECIFIC LOGIC BASED UPON THE YES RESULTS RETURNED FROM ALL RUNNING AGENTS -540 EXTRACT MESSAGE TYPE COMMAND & STATUS - 564 LAUNCH A SECONDARY AGENT ON ANOTHER REMOTE AGENT SERVER - 542 IS MESSAGE -562 LOG EVENT THE EXCEPTION WAS TYPE = AGENT MESSAGE THROWN BY REMOTE AGENT AND STATUS = RESULTS AND COMMAND = COMPUTATION? -560 PRINT STACK TRACE YES YES 556 -544 CALL THE setChanged() AND notifyObservers() IS THE RESULT NO OBJECT AN INSTANCE METHODS OF THE BASE OBSERVABLE OBJECT OF AN EXCEPTION? -546 CALL THE UPDATE METHOD IN AGENT DISPATCHER **√554** EXTRACT THE RESULT OBJECT FROM THE ARRAY. THIS IS THE COMPUTATIONAL RESULT FROM THE REMOTE MOBILE AGENT -548 OBTAIN THE ARRAY RESULTS OBJECT ENCAPSULATED WITHIN THE AGENTX MESSAGE SENT BY THE MOBILE AGENT YES 552 IS THE -550 LENGTH GREATER OBTAIN THE LENGTH OF THE ARRAY OF OBJECTS IN THE RESULT THAN ZERO?

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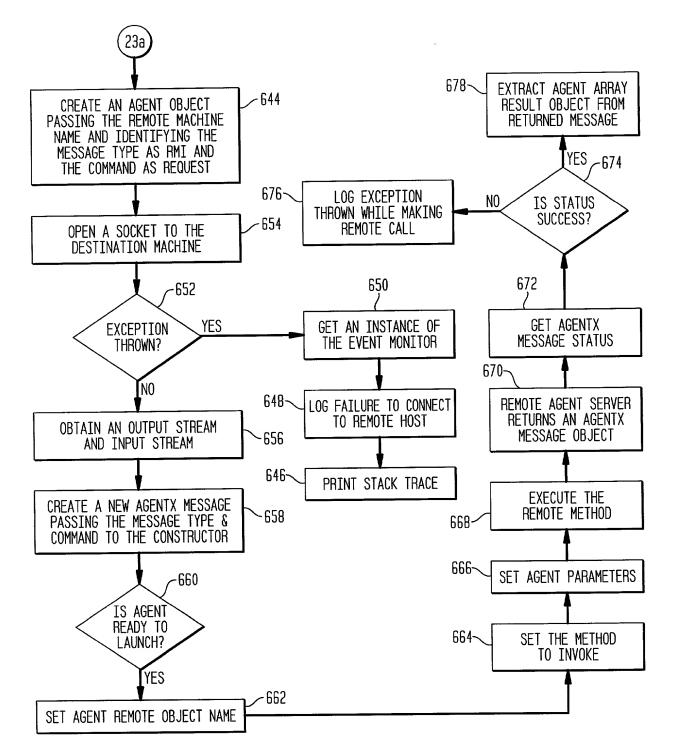
FIG. 21



24/36 FIG. 22



25/36 FIG. 23



26/36 **FIG. 24**

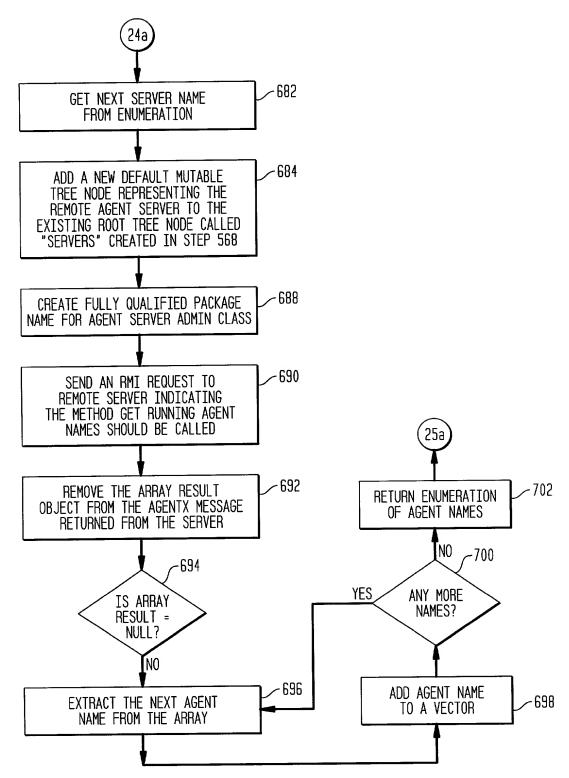
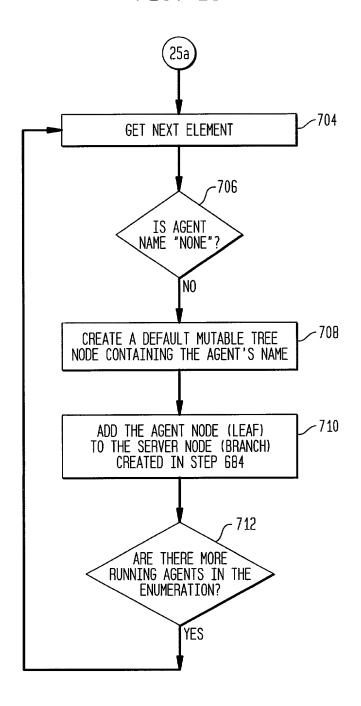
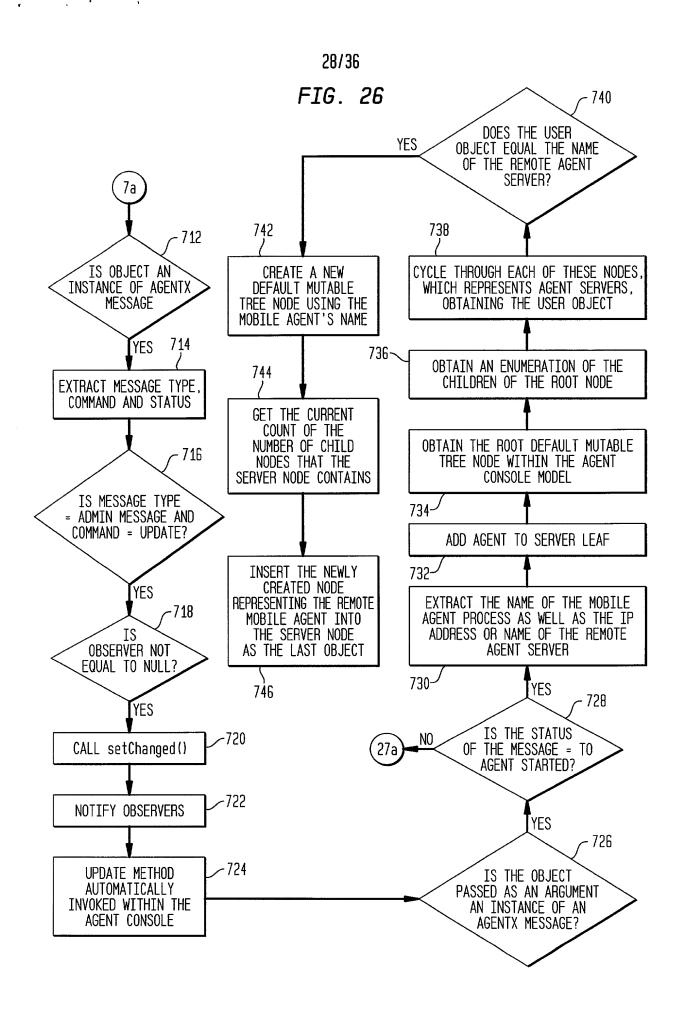
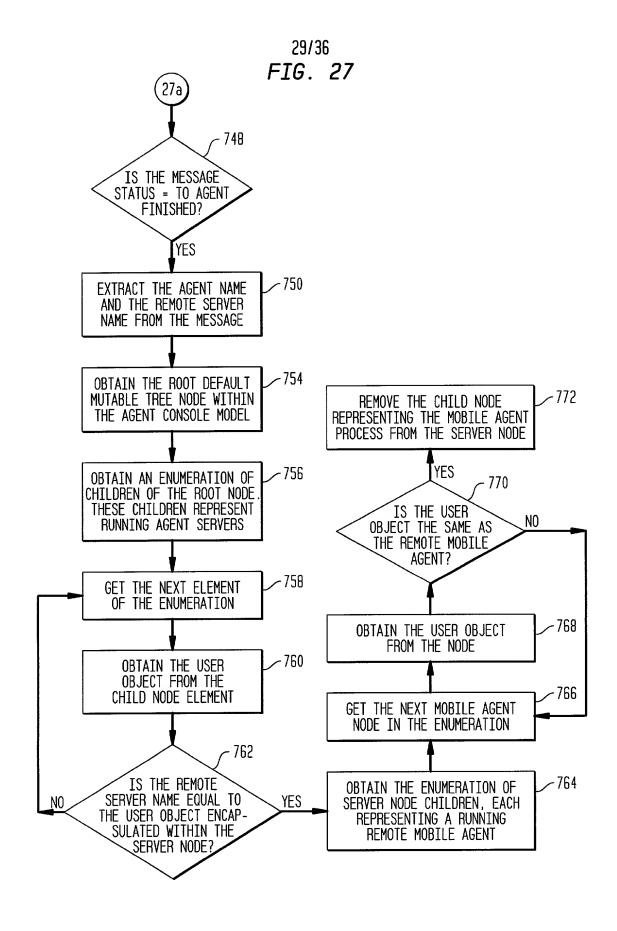


FIG. 25







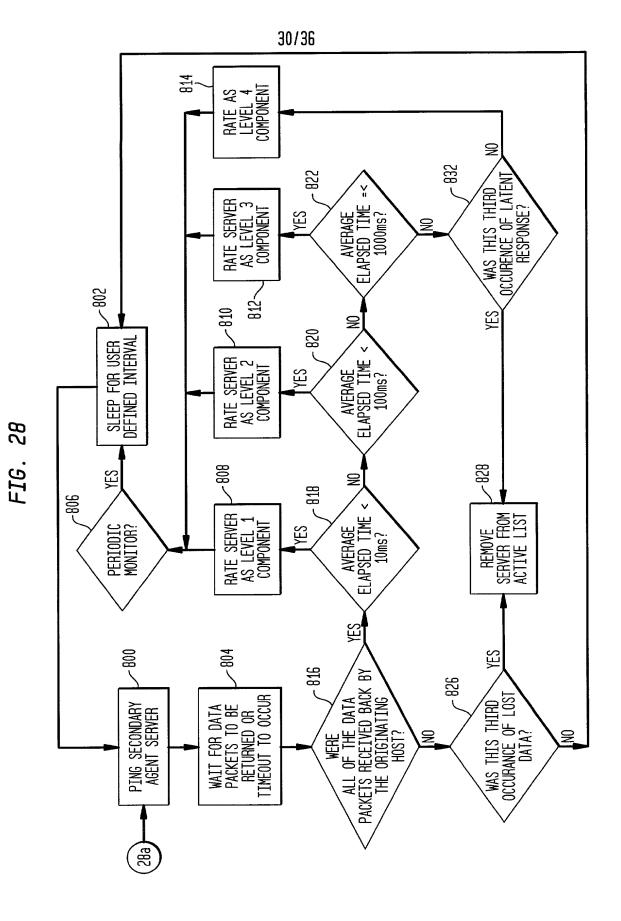
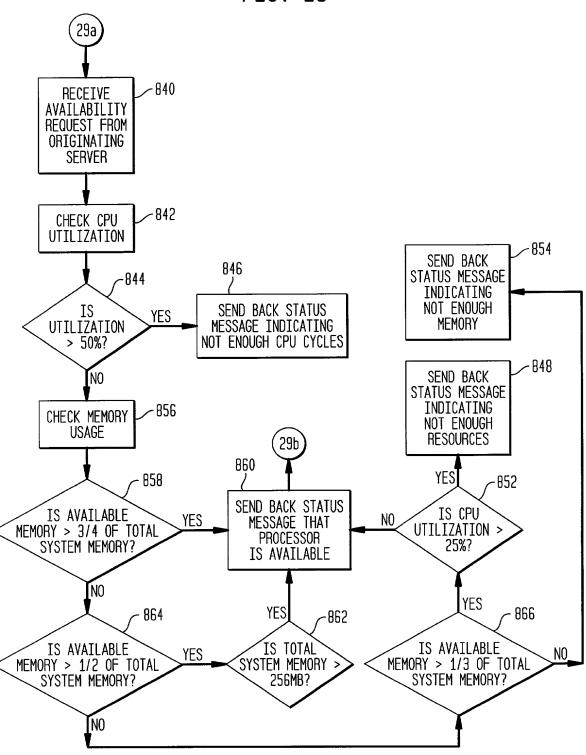


FIG. 29



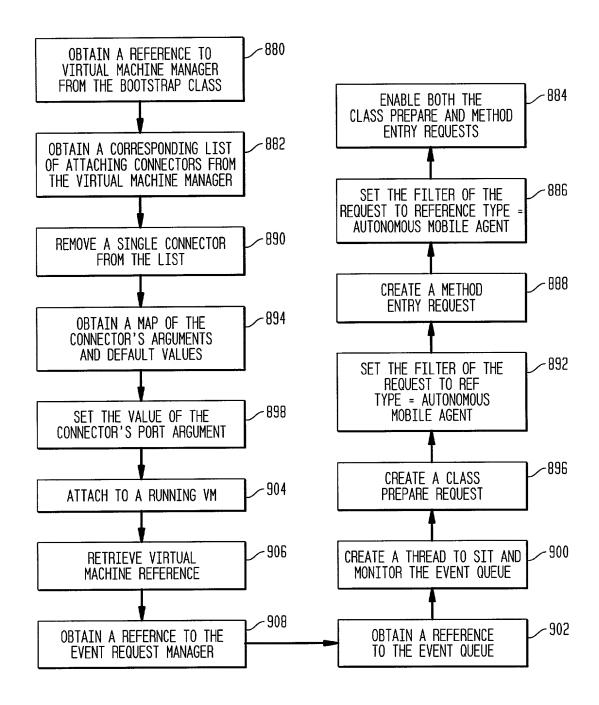
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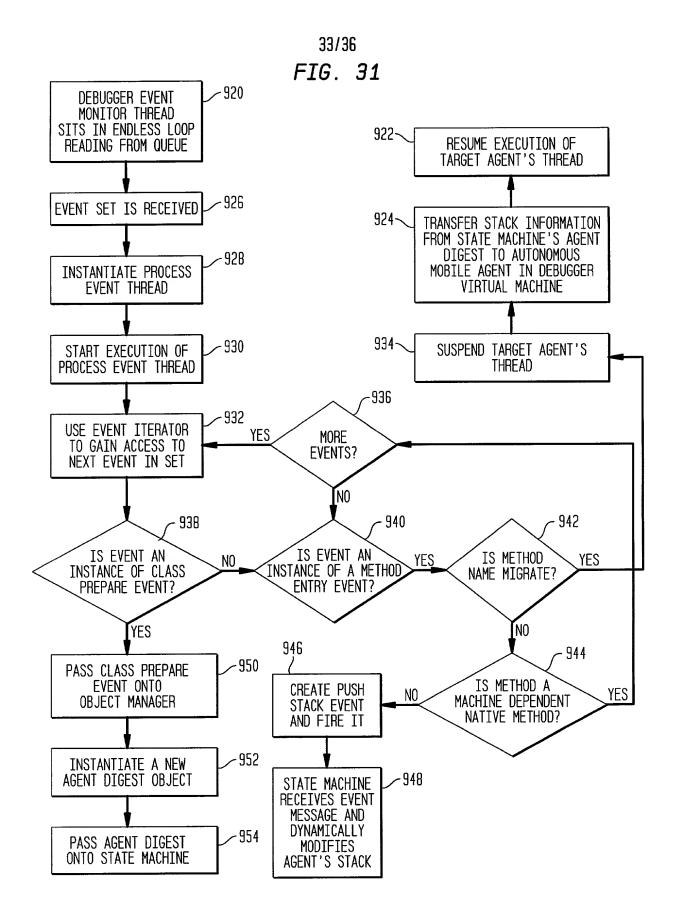
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FIG. 30





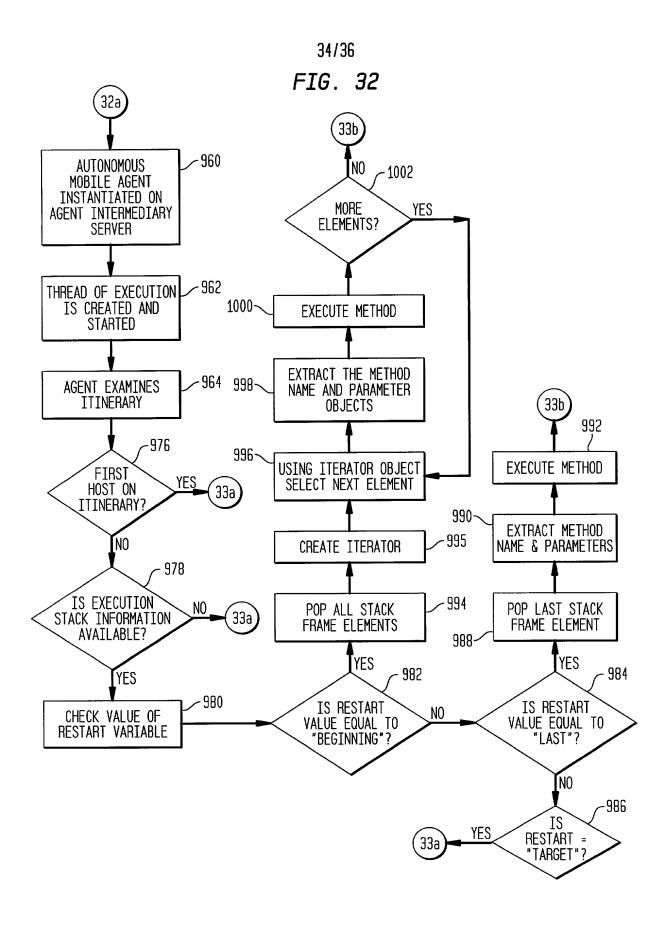


FIG. 33

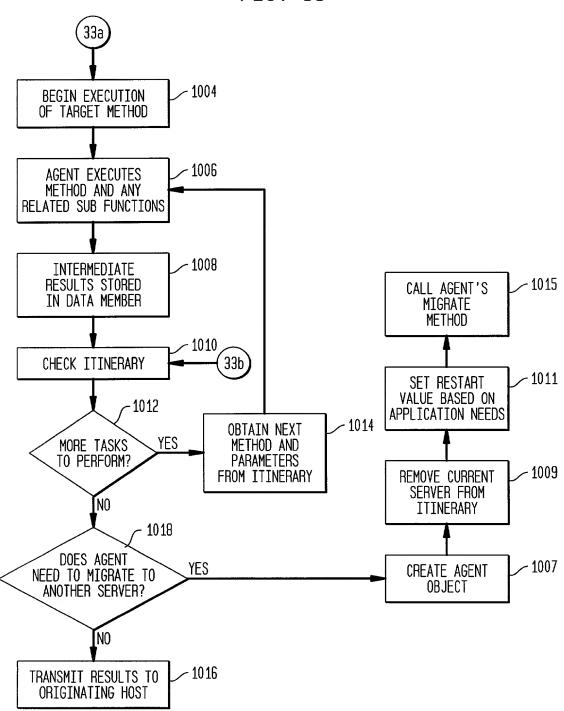


FIG. 34 - 1020 ACCEPT AGENT CONNECTION 1024 **-1022** MAKE AGENT YES IS IT A REQUEST AVAILABLE FOR INSTANT TO REGISTER? MESSAGE NO 1030 1026 1028 IS IT A REQUEST TO JOIN A **DOES** YES NO **CREATE** CONFERENCE ALREADY CONFERENCE EXIST? **CONFERENCE?** YES NO 1032 **-1034 ESTABLISH** IS IT A AGENT AS A REQUEST TO SEND NO **PARTICIPANT** AN INSTANT MESSAGE? 1040 1036 1038 YES IS IT A **PUBLISH** YES_ REQUEST TO CONTRIBUTE CONTRIBUTION TO **OBTAIN TARGET** TO AN ACTIVE ALL PARTICIPANTS AGENT'S ID **CONFERENCE?** 1042 **- 1044** IS AGENT SEND AN INSTANT YES CURRENTLY AVAILABLE MESSAGE TO TARGET AGENT FOR CHAT? NO. **-1046** RESPOND TO REQUESTING AGENT THAT TARGET AGENT IS NOT **AVAILABLE**

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